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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. <i>VB</i>
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EXAMINER

ART UNIT	PAPER NUMBER
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DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/055,145

Applicant(s)

Weeks et al

Examiner

David H Kruse

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 0 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claims 1-49 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) ____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: ____

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-7, 21-24, 36-39, 44, 47 and 48, drawn to a transgenic plant using an oxygenase gene, classified in class 800, subclass 300 for example.
 - II. Claims 10-16, 26-29, 44, 47 and 48, drawn to a transgenic plant using a ferredoxin gene, classified in class 800, subclass 300 for example.
 - III. Claims 31-34, 40-44, 47 and 48, drawn to a transgenic plant having both an oxygenase and a ferredoxin gene, classified in class 800, subclass 300 for example.
 - IV. Claims 8, 9 and 46, drawn to an isolated oxygenase protein, classified in class 435, subclass 190 for example.
 - V. Claims 17, 18 and 46, drawn to an isolated ferredoxin protein, classified in class 530, subclass 400 for example.
 - VI. Claims 19 and 46, drawn to an isolated reductase enzyme, classified in class 435, subclass 189 for example.
 - VII. Claims 20 and 46, drawn to an isolated O-demethylase enzyme, classified in class 435, subclass 183 for example.
 - VIII. Claims 25 and 45, drawn to a method of detoxification using microorganisms transformed with an oxygenase gene, classified in class 435, subclass 262 for example.

- IX. Claim 30, drawn to a microorganism transformed with a ferredoxin gene, classified in class 435, subclass 252.3 for example.
- X. Claims 35 and 45, drawn to a microorganism transformed with both a ferredoxin and oxygenase gene and a method of detoxification, classified in class 435, subclass 252.3 for example.
- XI. Claim 49, drawn to a method of selecting cells using an enzymatic assay, classified in class 435, subclass 4 for example.

Claims 44, 47 and 48 are generic to Groups I-III and will be examined to the extent they read on the elected invention. In addition, Claim 46 is generic to Groups IV-VII and will be examined to the extent it reads on the elected invention.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I-XI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions of Groups I-III produce different transgenic plants because they use different DNA sequences or combinations thereof.

Furthermore, Groups I-III involve methods for plant transformation and regeneration not required by any other group. The different inventions of Groups IV-VII utilize different isolated enzymes, each enzyme or protein has a different mode of activity and can be used in methods other than those in Groups VIII or XI. Furthermore, a process other than gene expression, such as chemical synthesis can make each enzyme. Groups VIII-X are transformed microorganisms and methods of culture in the

presence of herbicide that do not require the use of any of Groups I-VII or XI. Group XI is a method of selection that can be used to detect a specific enzymatic activity in cells other than those derived from Groups I-III or VIII-X, and that requires a fluorescent assay not required by any other method.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, recognized divergent subject matter, and because the search required for one of the groups is not required for another, restriction for examination purposes as indicated is proper.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

5. Applicant is advised that the reply to this requirement to be complete within 30 days must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David H. Kruse, Ph.D. whose telephone number is (703) 306-4539. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Paula Hutzell can be reached at (703) 308-4310. The fax phone number for this Group is (703) 308-4242 or (703) 305-3014. Election by fax can be made using the number (703) 308-4315.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1234.

David H. Kruse, Ph.D.
18 September, 2000

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